### VERSION DESCRIPTION DOCUMENT FOR THE NASA ONLINE CATALOG SYSTEM (NOSC)

Release 3.0

**PrISMS Contract** 

**NOVEMBER 2001** 



National Aeronautics and Space Administration

**George C. Marshall Space Flight Center** Huntsville, AL 35812

#### VERSION DESCRIPTION DOCUMENT FOR THE NASA ONLINE CATALOG SYSTEM (NOSC) RELEASE 3.0

Submitted by

Charmaine Styles-Oscarson Technical Area Lead

Reviewed by

CSC

Lindon Gargis Agencywide IRM, Property and Procurement Systems

Jim Cofer Configuration Management

Hector Garcia Agencywide IRM Richard Bishop DBA

Prepared by

Computer Sciences Corporation, Contract NAS8-60000

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION GEORGE C. MARSHALL SPACE FLIGHT CENTER HUNTSVILLE, ALABAMA

November 2001

#### VERSION DESCRIPTION DOCUMENT FOR THE NASA ONLINE CATALOG SYSTEM (NOSC) RELEASE 3.0

Approved by

Sheila Fogle Consolidation Center Project Manager

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION GEORGE C. MARSHALL SPACE FLIGHT CENTER HUNTSVILLE, ALABAMA

November 2001

1.0	INT	RODUCTION1 - 1
	1.1	IDENTIFICATION OF THE RELEASE
	1.2	PURPOSE OF THE RELEASE1 - 1
	1.3	SCOPE1 - 1
	1.4	CONTACT POINTS
2.0	FUI	NCTIONAL INFORMATION2 - ^
	2.1	FUNCTIONAL CHANGES2 - ^
	2.2	FUNCTIONAL INTERFACES
	2.3	CRITICAL ISSUES
	2.4	AFFECTED DOCUMENTS
	2.5	APPLICATION SYSTEM ADMINISTRATION2 - 2
3.0	TE	CHNICAL INFORMATION
	3.1	TECHNICAL SYSTEM INTERFACES
	3.2	DATA DICTIONARY CHANGES
	3.3	SOFTWARE OBJECT CHANGES
	3.4	DATABASE ADMINISTRATION
		3.4.1 RELEASE DATASET NAMES
		3.4.2 INVENTORY OF OBJECTS
		3.4.3 STORAGE CONSIDERATIONS
		3.4.4 INSTALLATION PROCEDURES
	3.5	OPERATIONAL PREPARATION
4.0	KN	OWN AND OPEN PROBLEMS4 - 1

#### **APPENDICES**

Аp	pendix	Page
Α	ABBREVIATIONS AND ACRONYMS	A - 1
В	GLOSSARY	B - 1
С	FUNCTIONAL CHANGE VALIDATION PROCEDURES	C - 1
D	INSTALLATION INSTRUCTIONS	D - 1
Е	SAMPLE JOB CONTROL LANGUAGE	E - 1

#### 1.0 INTRODUCTION

This Version Description Document (VDD) describes the changes and installation procedures for Release 3.0 of the NASA Online Catalog System (NOSC). This section identifies the release, describes its purpose, defines its scope, and identifies its contact points.

#### 1.1 IDENTIFICATION OF THE RELEASE

This software release is identified as NOSC, Release 3.0 and has an effective release date of November 21, 2001.

#### 1.2 PURPOSE OF THE RELEASE

This release implements modifications necessitated by the following Change Control Requests (CCR):

- **CCR 973** Web-enable the NOSC catalog search and warehouse stock withdrawal processes.
- **CCR 974** Capture the source document number in NOSC to allow it to be printed on the MRO and Issue Authorization.

#### 1.3 SCOPE

This VDD provides the functional and technical user of NOSC with information regarding the contents, status, and structure of Release 3.0, including the following:

- Changes implemented since Release 2.2.0.
- Validation procedures to ensure the reliability of release changes.
- References to other documentation affected by this release.
- Detailed software installation instructions.

No waivers are associated with this release.

#### 1.4 CONTACT POINTS

Sustaining Engineering for NOSC is provided through the Consolidation Center (CC) located at Marshall Space Flight Center (MSFC). Questions regarding the functional and/or the technical aspects as well as the installation of this release should be directed to:

The NACC Technical Services Center (Identify yourself as SESAAS & NOSC.)

Telephone: (256) 544-6673

Email: charmaine.styles-oscarson@msfc.nasa.gov

FAX: (256) 544-1836

#### 2.0 FUNCTIONAL INFORMATION

This section includes details regarding functional changes, functional interfaces, critical issues, affected documents, and application system administration.

#### 2.1 FUNCTIONAL CHANGES

Please refer to Appendix C, Functional Change Validation Procedures, for a description of all functional changes related to this release. Appendix D, Installation Instructions, describes all Software PREDICT and SYSERR changes related to this release. Appendix E contains sample JCL that will be needed for release installation.

#### 2.2 FUNCTIONAL INTERFACES

This release has a functional impact on the interface with the NASA Supply Management System (NSMS).

#### 2.3 CRITICAL ISSUES

- To use the warehouse stock withdrawal order function of this NOSC release, your center must use NSMS and Entire X Broker 5.3.1 must be installed on the mainframe where NSMS resides. See Appendix D for installation instructions. To use this NOSC release to browse the supply catalog only requires that your center use NSMS.
- NOSC now requires all users to have user ids for system access. Refer to Appendix C for instructions.
- The NOSC web application should only be run using the following browsers:
  - o Internet Explorer 5.5 or higher on a PC platform.
  - o Netscape 6.0.1 or higher on a PC platform.
  - Netscape 6.0 or higher on a MacIntosh platform.

#### 2.4 AFFECTED DOCUMENTS

The following document is affected by this release:

NOSC User and Operations Guide (UOG)

#### 2.5 APPLICATION SYSTEM ADMINISTRATION

There are no application system administration changes associated with this release.

#### 3.0 TECHNICAL INFORMATION

This section includes details regarding technical system interfaces, data dictionary changes, software object changes, and database administration activities.

#### 3.1 TECHNICAL SYSTEM INTERFACES

NOSC is an application that interfaces real-time with the NASA Supply Management System (NSMS) and was developed for NASA's general user community for the following primary purposes:

- View NASA's supply inventory without needing access to NSMS.
- Order supplies directly from NASA's stock warehouse without intervention from a supply representative.
- Order supplies directly from outside vendors from a user's desktop via electronic commerce (EC) without intervention from a supply representative.

This release of NOSC includes several technical system interface changes. These are as follows:

- The user front-end of NOSC was re-engineered from a PowerBuilder client-server platform to a web-based platform using Java and HTML.
- The front-end relational database management system (RDBMS) that houses NASA's supply inventory changed from Sybase to Oracle. The database also became an agency-wide consolidated database.
- The client-server based middleware used for the interface between NOSC and NSMS was drastically streamlined. A single, middleware component written in Java was implemented to directly communicate from the web front-end to Entire X Broker on the mainframe. This design replaced numerous Sybase products and in-house developed C++ components as well as several Software AG (SAG) products such as the Entire X Network and Broker Attach Manager used for the client-server version.

#### 3.2 DATA DICTIONARY CHANGES

There are no data dictionary changes in this release.

#### 3.3 SOFTWARE OBJECT CHANGES

Modules affected by this release are included in Appendix D, Section 2.2.

#### 3.4 DATABASE ADMINISTRATION

This section describes the database administration activities for installation of this release.

#### 3.4.1 Release Dataset Names

Refer to Appendix D, Introduction section, for the release dataset names.

#### 3.4.2 <u>Inventory of Objects</u>

Refer to Appendix D, Paragraph 2.1, for an inventory of Natural object types.

#### 3.4.3 **Storage Considerations**

The changes represented by this release should not affect storage requirements.

#### 3.4.4 <u>Installation Procedures</u>

Refer to Appendix D, Installation Instructions for NOSC Software Release 3.0 for detailed software installation procedures.

#### 3.5 OPERATIONAL PREPARATION

Refer to the procedure described in Appendix D for assistance in preparing for proper installation and operational use of this release.

#### 4.0 KNOWN AND OPEN PROBLEMS

There are no known or open problems related to this release.

### APPENDIX A ABBREVIATIONS AND ACRONYMS

#### ABBREVIATIONS AND ACRONYMS

NOSC NASA Online Supply Catalog

CC Consolidation Center

CCR Change Control Request

DR Discrepancy Report

JCL Job Control Language

MSFC Marshall Space Flight Center

NACC NASA Automated Data Processing (ADP) Consolidation Center

NASA National Aeronautics and Space Administration

RC Requirements Change

SESAAS Sustaining Engineering Support for Agencywide Administrative

**Systems** 

VDD Version Description Document

SSC Stock Status Code

JIT Just-In-Time (Electronic Commerce - EC)

ISPR Issue Stock Transaction

DOST Due Out Stock Transaction (Backorder)

DIED Due In Electronic Direct Buy Transaction

DIEC Due In Electronic Commerce Transaction (JIT Transaction)

## APPENDIX B GLOSSARY

#### **GLOSSARY**

#### **Database Administration**

Responsibility for maintaining the physical database environment.

#### **Implementation**

The process by which a NASA site installs a software release and places it into operational use.

#### **Operational Preparation**

Preparation by a NASA site for installation and use of a release.

#### **System Administration**

Responsibility for administrative functions such as application security and table data maintenance associated with an application.

# APPENDIX C FUNCTIONAL CHANGE VALIDATION PROCEDURES

#### **FUNCTIONAL CHANGE VALIDATION PROCEDURES**

Index of validation procedures for changes in this release.

Section 1.0	<b>CCR</b> 973	Title Web-enable the NOSC catalog search and warehouse stock withdrawal processes.
2.0	974	Capture the source document number in NOSC to allow it to be printed on the MRO and Issue Authorization form in NSMS.

#### 1.0 CCR Number 973

#### **Functional Impact**

This version of NOSC now requires all users to have user ids for system access. The user ids can be entered into the NOSC database by 2 different processes as follows:

- Incorporate the customer id extract, EDPUCUST, into the NSMS extract
  job for your center (see validation procedures below). This will extract all
  users from the Customer Id table in NS-Security into a data file that will be
  imported into the NOSC Oracle database along with the other NSMS data
  files. Sample JCL is provided in Appendix E.
- Enter users via the Administration link from the NOSC Home Page. Refer to the NOSC 3.0 User Guide for assistance.

#### **Validation Procedures**

- 1. Execute the program, EDETBGO, in a batch job to activate Broker Services on your center's mainframe. Sample JCL is provided in Appendix E. (This batch job must run continuously in production. If database or system backups require exclusive use on your system, ensure the job is submitted afterward for the next business day.) Perform this step only if your center will be using the warehouse stock withdrawal order function in NOSC.
- 2. Execute the program, EDPUCEXS, in a batch job to extract NSMS data. This data will be loaded into the NOSC Oracle database. Sample JCL is provided in Appendix E. If your center prefers to extract customer id data and load it into NOSC as well, include EDPUCUST in the batch job.
- 3. Execute the batch job that uses FTP to download the NSMS extract data files to the Oracle database server. Sample JCL is provided in Appendix E.

- 4. Once the NSMS data files have been downloaded, the data must be imported into the NOSC Oracle database. Please contact Charmaine Styles-Oscarson at (256) 544-8503 or Sylvia Battles at (256) 544-8366. (When NOSC is implemented in production, the data imports will be scheduled to run automatically.)
- 5. Using one of the previously specified browsers listed under Critical Issues, enter the web address to access NOSC and begin using the system:

NOSC Web Address: <a href="http://noscap1.nacc.nasa.gov:8080/javadoc/Nosc.htm">http://noscap1.nacc.nasa.gov:8080/javadoc/Nosc.htm</a>

MODULE ID	MODULE DESCRIPTION	<u>TYPE</u>
EDDLCUST	Local Data Area for customer extract	LDA
EDETBGO	Identifies Broker Node, Class, Server, and Service	PGM
EDETBSRV	Registers Broker with the system.	PGM
EDGDA	Global Data Area for NOSC modules	GDA
EDPUCUST	Customer ID data extract	PGM
EDSCREEN	Displays parameters in EDETBGO batch job received from client	SUBROUTINE
EDSPVCOL	Module that determines if user is processing an order request or program stock quantity request	SUBPROGRAM
EDSPVCOP	Processes program stock quantity request	SUBPROGRAM
EDSPVCOR	Module that determines the type of order request to process	SUBPROGRAM

#### 2. CCR Number 974

#### **Functional Impact**

A source document number may be entered in NOSC when placing any type of an order. The source document number will be stored in NSMS when the order is processed thus allowing it to be printed on the MRO and Issue Authorization form.

Perform the validation procedures only if your center will be using the warehouse stock withdrawal order function in NOSC.

#### **Validation Procedures**

1. Using one of the previously specified browsers listed under Critical Issues, enter the web address to access NOSC and begin using the system:

NOSC Web Address: <a href="http://noscap1.nacc.nasa.gov:8080/javadoc/Nosc.htm">http://noscap1.nacc.nasa.gov:8080/javadoc/Nosc.htm</a>

- 2. Select an asset to process the following types of order requests:
  - ISPR for store stock
  - ISPR for standby stock
  - ISPR for program stock
  - ISPR for traceable asset
  - ISPR/DOST for store stock
  - DIEC (If applicable to your center)
  - DIED (If applicable to your center)

<sup>\*\*</sup> If assistance is needed for processing an order request, refer to the NOSC UOG.

MODULE ID	MODULE NAME	TYPE
EDSPVCOL	Module that determines if user is processing an order request or program stock quantity request	SUBPROGRAM
EDSPVCOR	Module that determines the type of order request to process	SUBPROGRAM
EDSRTRIS	Processes traceable asset order requests – ISPR transactions	SUBROUTINE
EDSRVCDB	Processes JIT direct buys - DIED transactions	SUBROUTINE
EDSRVCIS	Processes stock order requests - ISPR transactions	SUBROUTINE

EDSRVCJT Processes JIT orders from outside Vendors – DIEC transactions

SUBROUTINE

# APPENDIX D INSTALLATION INSTRUCTIONS FOR NOSC SOFTWARE RELEASE 3.0

### INSTALLATION INSTRUCTIONS AND CHECKLIST FOR NOSC SOFTWARE RELEASE 3.0

#### Introduction

Release information:

System Name: NOSC Release Number: 3.0

Release Date: November 21, 2001 Effective Date: November 21, 2001

The following dataset is located on the Central Distribution Facility.

• xxMOV.NOSC.PROD.R300.R1101.SRC

In case of installation problems, contact the NACC Technical Services Center (Identify yourself as SESAAS & NOSC.)

Telephone: (256) 544-6673

Email: charmaine.styles-oscarson@msfc.nasa.gov

FAX: (256) 544-1836

#### **Installation Sequence**

The sequence in which the installation of this release should occur is provided in the following list. A checklist is provided in Section 6.0 to assist in tracking the installation of this release.

- 1.0 Back Up Existing Data
- 2.0 Copy Source/Object Code
- 3.0 Catalog Source Code
- 4.0 Perform Release-Specific Procedures
- 5.0 Local JCL Mods
- 6.0 Installation Checklist

#### 1.0 Back Up Existing Data

It is advisable to back up the NSMS library as a precautionary measure prior to installation.

#### 2.0 Copy Source/Object Code

#### 2.1 Copy Source Code

Load the NOSC source library from dataset xxMOV.NOSC.PROD.R300.R1101.SRC. The source programs were unloaded using the Natural utility NATUNLD. The programs will be loaded to the application library NSMS, replacing any existing programs of the same name. The source module counts included in this release are listed below:

Natural Source Modules by type				
GLOBAL DATA AREA	1			
LOCAL/PARAM DATA AREA	1			
MAPS	0			
HELP ROUTINES	0			
SUBROUTINES	5			
SUBPROGRAMS	3			
PROGRAMS	3			
COPYCODE	0			
TEXT	0			
PROCESS	0			
MISCELLANEOUS OBJECTS	0			
Total:	13			

#### 2.2 List of Source Code Modifications

The following are the modules added, modified and deleted.

#### Added Modules:

1. EDDLCUST	Local Data Area for customer extract	Local Data Area
2. EDETBGO	Identifies Broker Node, Class, Server, and Service	Program
3. EDETBSRV	Registers Broker with the system.	Program
4. EDPUCUST	Customer ID data extract	Program
Changed Modules	S:	
1. EDGDA	Global Data Area for NOSC modules	GDA
2. EDSCREEN	Displays parameters in EDETBGO batch job received from client	SUBROUTINE
3. EDSPVCOL	Module that determines if user is processing an order request or program stock quantity request	SUBPROGRAM
4. EDSPVCOP	Processes program stock quantity request	SUBPROGRAM
5. EDSPVCOR	Module that determines the type of order request to process	SUBPROGRAM
6. EDSRTRIS	Processes traceable asset order requests – ISPR transactions	SUBROUTINE
7. EDSRVCDB	Processes JIT direct buys - DIED transactions	SUBROUTINE
8. EDSRVCIS	Processes stock order requests - ISPR transactions	SUBROUTINE
9. EDSRVCJT	Processes JIT orders from outside Vendors – DIEC transactions	SUBROUTINE

#### **Deleted Modules:**

There are no modules deleted in this release.

#### 3.0 Catalog Source Code

Run a batch job to catalog (CATALL) all modules in the NSMS library or other named library. It is necessary to catalog the Global Data Area, EDGDA. The SESAAS Batch standard parameters should be used for the compile.

After all objects are compiled, the NOSC application will run under the SESAAS batch standard parameters.

#### 4.0 Perform Release-Specific Procedures

In order to use the warehouse stock withdrawal order function for NOSC 3.0, Entire X Broker Services must be installed on your center's mainframe where NSMS resides. For assistance with the installation please contact the NACC Technical Services Center (Identify yourself as SESAAS & NOSC.) Telephone: (256) 544-6673.

#### 5.0 Local JCL Mods

There are local JCL mods with this release. Please see Appendix E for sample JCL.

#### 6.0 Installation Checklist

- 1.0 Back Up Existing Data
- 2.1 Copy Source Code
- 3.0 Catalog Source Code
- 4.0 Perform Release-Specific Procedures
- 5.0 Local JCL Mods

# APPENDIX E SAMPLE JOB CONTROL LANGUAGE FOR RELEASE 3.0

#### SAMPLE JOB CONTROL LANGUAGE FOR RELEASE 3.0

Sample JCL is listed for the EDPUCEXS in Release 3.0.

#### 1. EDPUCEXS - NSMS Data Extract

```
000001 //IRNOSC JOB (XXXXXXXXXXX,503),NOSC,MSGCLASS=J,CLASS=M,
000002 //
         NOTIFY=XXXXX
000003 /*JOBPARM LINES=100
000005 // JCLLIB ORDER=(SYS2.USERPROC)
000006 //STEP01 EXEC N02Z,PRM='MT=0'
000007 //CMPRINT DD SYSOUT=(R,P3030132)
000008 //CMSYNIN DD *
000009 NSTESTRC, NSBATCH
000010 %*
000011 NSBATCH
000012 EDPUCEXS
000013 NSNT
000014 EDPUORDR
000015 NSNT
000016 EDPUCUST
000017 FIN
000018 /*
000019 //CMPRT01 DD SYSOUT=(R,P3030132)
000020 //CMWKF01 DD DSN=MSIRM.NOSCDD.ITEM.GENTECH.NAME,DISP=SHR
000021 //CMWKF02 DD DSN=MSIRM.NOSCDD.ITEM.HEADERS.DISP=SHR
000022 //CMWKF03 DD DSN=MSIRM.NOSCDD.ITEM.DESC,DISP=SHR
000023 //CMWKF04 DD DSN=MSIRM.NOSCDD.ITEM.NSN.DISP=SHR
000024 //CMWKF05 DD DSN=MSIRM.NOSCDD.ITEM.PART.NUMBER,DISP=SHR
000025 //CMWKF06 DD DSN=MSIRM.NOSCDD.ITEM.TECH.DESC,DISP=SHR
000026 //CMWKF07 DD DSN=MSIRM.NOSCDD.ITEM.ASSET.INFO,DISP=SHR
000027 //CMWKF08 DD DSN=MSIRM.NOSCDD.ITEM.MFG,DISP=SHR
000028 //CMWKF09 DD DSN=MSIRM.NOSCDD.ITEM.AKANAME,DISP=SHR
000029 //CMWKF10 DD DSN=MSIRM.NOSCDD.ITEM.STATUS,DISP=SHR
000030 //CMWKF11 DD DSN=MSIRM.NOSCDD.ITEM.DLVRY,DISP=SHR
000031 //CMWKF12 DD DSN=MSIRM.NOSCDD.ITEM.USERS,DISP=SHR
000032 //CMWKF13 DD DSN=MSIRM.NOSCDD.ITEM.ORDER.TRACE,DISP=SHR
000033 //CMWKF14 DD DSN=MSIRM.NOSCDD.ITEM.CRITERIA.CODES.DISP=SHR
000034 //CMWKF15 DD DSN=MSIRM.NOSCDD.ITEM.NONTRACE.PGMSTOCK,DISP=SHR
```

Sample JCL is listed for the FTP of data files for NOSC in Release 3.0.

#### 2. FTP of Data Files Created by EDPUCEXS

```
000001 //IRNOSC19 JOB (XXXXXXXXXXXXX,503), 'NSMS', MSGCLASS=J, CLASS=M,
000002 //
          REGION=4M,COND=(0,LT)
000003 //*
000008 //* * This runstream FTP's the data to an Oracle Server
000010 //* * NOSCDEV.NACC.NASA.GOV >>>>> This Is Test
000011 //* * NOSCDB.NACC.NASA.GOV >>>>> This Is Production
000013 //FTP EXEC PGM=FTP,REGION=4096K
000014 //INPUT MSIRM.NSMSDD. DD * /* Use your site's high level qualifers
000015 noscdev.nacc.nasa.gov /* Use noscdb for production instead of noscdev
000016 xxxxnsms /* Replace your site's acronym with the x's (ex. msfcnsms, sscnsms)
000017 nasa$10
000018 locsite trail
000019 lcd 'MSIRM.NSMSDD'
000020 cd dev/data /* Use prod/data for production
000021 dir
000022 put 'MSIRM.NSMSDD.ITEM.ASSET.INFO' item.asset.info
000023 put 'MSIRM.NSMSDD.ITEM.DESC' item.desc
000024 put 'MSIRM.NSMSDD.ITEM.GENTECH.NAME' item.gentech.name
000025 put 'MSIRM.NSMSDD.ITEM.HEADERS' item.headers
000026 put 'MSIRM.NSMSDD.ITEM.MFG' item.mfg
000027 put 'MSIRM.NSMSDD.ITEM.NSN' item.nsn
000028 put 'MSIRM.NSMSDD.ITEM.PART.NUMBER' item.part.number
000029 put 'MSIRM.NSMSDD.ITEM.TECH.DESC' item.tech.desc
000030 put 'MSIRM.NSMSDD.ITEM.AKANAME' item.akaname
000031 put 'MSIRM.NSMSDD.ITEM.STATUS'
                                     item.status
000032 put 'MSIRM.NSMSDD.ITEM.DLVRY'
                                     item.dlvry
000033 put 'MSIRM.NSMSDD.ITEM.USERS' item.users
000034 put 'MSIRM.NSMSDD.ITEM.ORDER.TRACE' item.order.trace
000035 put 'MSIRM.NSMSDD.ITEM.CRITERIA.CODES' item.criteria.codes
000036 put 'MSIRM.NSMSDD.ITEM.NONTRACE.PGMSTOCK' item.nontrace.pgmstock
000037 dir
000038 QUIT
000039 /*
000040 //OUTPUT MSIRM.NSMSDD. DD SYSOUT=*
000041 //SYSPRINT DD SYSOUT=*
000042 //
      ****** Bottom of Data *********
```

Sample JCL is listed for the EDETBGO in Release 3.0.

#### 3. EDETBGO – Broker Services Batch Job

```
000001 //IRETBGO JOB (XXXXXXXXXXX,503),NOSC,MSGCLASS=A,CLASS=D,
000002 //
      NOTIFY=XXXXX
000005 //STEP01 EXEC N56Z,PRM='IM=D',TIME=1440
000006 //CMPRINT DD SYSOUT=A
000007 //CMSYNIN DD *
000008 NSDEVL, NSBATCH, NSBATCH
000009 EDETBGO
000010 ETB406,NOSC,NOSCQRY,TST_NOSC /* Use the parms setup for your site.
000011 FIN
000012 /*
000013 //
```